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## RAW SEQUENCE LISTING

DATE: 05/01/2002

PATENT APPLICATION: US/09/518,156A

TIME: 12:33:19

Input Set : A:\sequence.listing.asfiled.txt

Output Set: N:\CRF3\05012002\I518156A.raw

5 <110> APPLICANT: Tarleton, Rick  
 7 Garg, Nisha  
 11 <120> TITLE OF INVENTION: PROPHYLACTIC AND THERAPEUTIC IMMUNIZATION AGAINST INFECTION  
 AND DISEASE  
 15 <130> FILE REFERENCE: 235.00200101  
 19 <140> CURRENT APPLICATION NUMBER: 09/518,156A  
 21 <141> CURRENT FILING DATE: 2000-03-02  
 25 <150> PRIOR APPLICATION NUMBER: 60/122,532  
 27 <151> PRIOR FILING DATE: 1999-03-02  
 31 <160> NUMBER OF SEQ ID NOS: 24  
 35 <170> SOFTWARE: PatentIn version 3.0  
 39 <210> SEQ ID NO: 1  
 41 <211> LENGTH: 8  
 43 <212> TYPE: PRT  
 45 <213> ORGANISM: Trypanosoma cruzi  
 49 <400> SEQUENCE: 1  
 51 Val Asp Tyr Asn Phe Thr Ile Val  
 52 1 5  
 54 <210> SEQ ID NO: 2  
 56 <211> LENGTH: 8  
 58 <212> TYPE: PRT  
 60 <213> ORGANISM: Gallus gallus  
 64 <400> SEQUENCE: 2  
 66 Ser Ile Ile Asn Phe Glu Lys Leu  
 67 1 5  
 69 <210> SEQ ID NO: 3  
 71 <211> LENGTH: 34  
 73 <212> TYPE: DNA  
 C--> 75 <213> ORGANISM: Artificial  
 79 <220> FEATURE:  
 81 <223> OTHER INFORMATION: forward primer  
 83 <400> SEQUENCE: 3  
 84 agtcgacgga tccatgattg cattgtgcga aggc 34  
 87 <210> SEQ ID NO: 4  
 89 <211> LENGTH: 35  
 91 <212> TYPE: DNA  
 C--> 93 <213> ORGANISM: Artificial  
 97 <220> FEATURE:  
 99 <223> OTHER INFORMATION: reverse primer  
 101 <400> SEQUENCE: 4  
 102 atctagaagc ttcatagttc accgacactc agtgg 35  
 105 <210> SEQ ID NO: 5  
 107 <211> LENGTH: 35  
 109 <212> TYPE: DNA

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C--> 111 <213> ORGANISM: Artificial
      115 <220> FEATURE:
      117 <223> OTHER INFORMATION: reverse primer
      119 <400> SEQUENCE: 5
      120 atctagaagc ttcatgccgc agcatttgct tcccc
      123 <210> SEQ ID NO: 6
      125 <400> SEQUENCE: 6
W--> 126 000
      128 <210> SEQ ID NO: 7
      130 <211> LENGTH: 8
      132 <212> TYPE: PRT
      134 <213> ORGANISM: Trypanosoma cruzi
      138 <400> SEQUENCE: 7
      140 Val Asn His Arg Phe Thr Leu Val
      141 1 5
      143 <210> SEQ ID NO: 8
      145 <211> LENGTH: 8
      147 <212> TYPE: PRT
      149 <213> ORGANISM: Trypanosoma cruzi
      153 <400> SEQUENCE: 8
      155 Val Asn His Asp Phe Thr Val Val
      156 1 5
      158 <210> SEQ ID NO: 9
      160 <400> SEQUENCE: 9
W--> 161 000
      163 <210> SEQ ID NO: 10
      165 <211> LENGTH: 28
      167 <212> TYPE: DNA
C--> 169 <213> ORGANISM: Artificial
      173 <220> FEATURE:
      175 <223> OTHER INFORMATION: forward primer
      177 <400> SEQUENCE: 10
      178 aggatccatg attgcatttg tcgaaggc
      181 <210> SEQ ID NO: 11
      183 <211> LENGTH: 30
      185 <212> TYPE: DNA
C--> 187 <213> ORGANISM: Artificial
      191 <220> FEATURE:
      193 <223> OTHER INFORMATION: reverse primer
      195 <400> SEQUENCE: 11
      196 aaagcttcat agttcaccga cactcagtgg
      199 <210> SEQ ID NO: 12
      201 <211> LENGTH: 26
      203 <212> TYPE: DNA
C--> 205 <213> ORGANISM: Artificial
      209 <220> FEATURE:
      211 <223> OTHER INFORMATION: forward primer
      213 <400> SEQUENCE: 12
      214 aagatcttgt ggaaaggaat ttgagg

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217 <210> SEQ ID NO: 13
219 <211> LENGTH: 28
221 <212> TYPE: DNA
C--> 223 <213> ORGANISM: Artificial
227 <220> FEATURE:
229 <223> OTHER INFORMATION: reverse primer
231 <400> SEQUENCE: 13
232 actcgagtca cagtgggcgg ttgtacag                28
235 <210> SEQ ID NO: 14
237 <211> LENGTH: 27
239 <212> TYPE: DNA
C--> 241 <213> ORGANISM: Artificial
245 <220> FEATURE:
247 <223> OTHER INFORMATION: forward primer
249 <400> SEQUENCE: 14
250 aagatctctg tgaggctgca gacgctg                27
253 <210> SEQ ID NO: 15
255 <211> LENGTH: 28
257 <212> TYPE: DNA
C--> 259 <213> ORGANISM: Artificial
263 <220> FEATURE:
265 <223> OTHER INFORMATION: reverse primer
267 <400> SEQUENCE: 15
268 acccggggta ttggtcgcca ccgtttcc                28
271 <210> SEQ ID NO: 16
273 <211> LENGTH: 26
275 <212> TYPE: DNA
C--> 277 <213> ORGANISM: Artificial
281 <220> FEATURE:
283 <223> OTHER INFORMATION: forward primer
285 <400> SEQUENCE: 16
286 ggttcgattg gggttggtgt aatata                26
289 <210> SEQ ID NO: 17
291 <211> LENGTH: 26
293 <212> TYPE: DNA
C--> 295 <213> ORGANISM: Artificial
299 <220> FEATURE:
301 <223> OTHER INFORMATION: reverse primer
303 <400> SEQUENCE: 17
304 aaataatgta cgggkgagat gcatga                26
307 <210> SEQ ID NO: 18
309 <400> SEQUENCE: 18
W--> 310 000
312 <210> SEQ ID NO: 19
314 <400> SEQUENCE: 19
W--> 315 000
317 <210> SEQ ID NO: 20
319 <211> LENGTH: 1656
321 <212> TYPE: DNA

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323 <213> ORGANISM: Trypanosoma cruzi
327 <400> SEQUENCE: 20
328 atgcggaaga aagccgcagc attagcagcg cccacagcag acacacggcc gacgtgccgc      60
330 ggggctgcca ttgccataa atttatggaa cgtgccggcc cccgtgaggg cgttgggaga      120
332 tcaacggaga tgccggctgc tggaccgacg ggggtctcaa gaactcaaac gcaacgggag      180
334 gtgaaagcgt cacaagacgc cgacgcggcg gccattagta gttatttcca gtccgaattg      240
336 gtgacatctc agtcgcacga ggggtgtgtct cctctggcaa agactagggc caacgaacgg      300
338 cggaacgggg agcaggagcg ggagaaggaa ctgccggcgg ttggtggcgc cgttccaact      360
340 gggaagggga cggaccccaa acagcagtg ctgcaggatt tgccagcgat gcacgcggag      420
342 ggacaaaacc agcacggtag agagggtgac aagggtgttt ccgtgaagat ggactccct      480
344 ggtcgcgtac aggtgctgga gcaaatgttg ctacacctgg ctgcattgaa cagacagcta      540
346 gaattagaac ttatagaaac gcgacgggaa ctgacgatgt acaagcagct tttacctgat      600
348 gtgcagcgcc agaccgaggg ccatgctttg tctcaggagc atcaciaaagc gaatagtgt      660
350 gctccgccac tgatgtcaga tgagaggcga cgacagatgc tctttacagg gcaacaacaa      720
352 caacagcaac aagtgggaaga tctgcatggc ggtattagcg ggtgggaaac ggcagcgagg      780
354 agaatgcgct atggttacga ggagggggag agggacgccc tttcagatgg tgagggccgt      840
356 ccacgttgcg caggtcgtat gggctccccg aagagattcc tttcaacaca accgcctcga      900
358 agcagcagga accatcgga cctcacgct gctaacggga caaatggcaa tagtcatgtt      960
360 cccattcgt ccagacaaaa aagtcacccg acaagaggag ctgctgtaac ttccgtaccg     1020
362 ttggcggcgt ccgcaaccaa tcgccagggt cgttccatgc gacaacatac ccgaccccg      1080
364 ggaccttctt atcttttcga acgcctcgac gctgaggatg caattgatat gctggagacg      1140
366 ctgaagcgct ctctcatgta tcgctgcaac cactcgcac atcgatcaac agaaggagat      1200
368 ttgtgcggc ccgcgcgaa gcccggaaa ggcacgcgg ctgttccacc accaccgcca      1260
370 ccaccgcca tgctcatc gtcacaaaga aagcttgccg ccgcagttgc tggagcgccg      1320
372 gcatgcagcg tctcagcag acacggaagg aacctggcg tttctgcggt gggagatccg      1380
374 tcaaggggca atcgagtttc agaaacagct cgcatagctc atgctcctt ttttgggggg      1440
376 aagaaatgcg cgccgggctt aacccaactc catttctctt ccccttccag aagggtacg      1500
378 ccgatgaaaa aagacacgcc attgtcacgt ggtcaagcgg ctggagtagc agcagtagcg      1560
380 gtgggcggtg acgggcagct agaggcactg cagaggcggt actgggaaca gtcccgtgcg      1620
382 atattggagc agcttgaaaa catgctggca gctgat      1656

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385 &lt;210&gt; SEQ ID NO: 21

387 &lt;211&gt; LENGTH: 39

389 &lt;212&gt; TYPE: DNA

C--&gt; 391 &lt;213&gt; ORGANISM: Artificial

395 &lt;220&gt; FEATURE:

397 &lt;223&gt; OTHER INFORMATION: pTAT linker

399 &lt;400&gt; SEQUENCE: 21

400 tccaccatgg ccggtaccgg tctcgagggtg catgcgggtg 39

403 &lt;210&gt; SEQ ID NO: 22

405 &lt;211&gt; LENGTH: 14

407 &lt;212&gt; TYPE: PRT

C--&gt; 409 &lt;213&gt; ORGANISM: Artificial

413 &lt;220&gt; FEATURE:

415 &lt;223&gt; OTHER INFORMATION: pTAT linker

417 &lt;400&gt; SEQUENCE: 22

419 Gly Ser Thr Met Ala Gly Thr Gly Leu Glu Val His Ala Val

420 1 5 10

422 &lt;210&gt; SEQ ID NO: 23

424 &lt;211&gt; LENGTH: 41

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426 &lt;212&gt; TYPE: DNA

C--&gt; 428 &lt;213&gt; ORGANISM: Artificial

432 &lt;220&gt; FEATURE:

434 &lt;223&gt; OTHER INFORMATION: pTAT-HA linker

436 &lt;400&gt; SEQUENCE: 23

437 ccatgtccgg ctatccatat gacgtcccag actatgctgg c

41

440 &lt;210&gt; SEQ ID NO: 24

442 &lt;211&gt; LENGTH: 13

444 &lt;212&gt; TYPE: PRT

C--&gt; 446 &lt;213&gt; ORGANISM: Artificial

450 &lt;220&gt; FEATURE:

452 &lt;223&gt; OTHER INFORMATION: pTAT-HA linker

454 &lt;400&gt; SEQUENCE: 24

456 Met Ser Gly Tyr Pro Tyr Asp Val Pro Asp Tyr Ala Gly

457 1 5 10

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 05/01/2002  
PATENT APPLICATION:    US/09/518,156A      TIME: 12:33:20

Input Set : A:\sequence.listing.asfiled.txt  
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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#: 3, 4, 5, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24

## VERIFICATION SUMMARY

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DATE: 05/01/2002

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Input Set : A:\sequence.listing.asfiled.txt

Output Set: N:\CRF3\05012002\I518156A.raw

L:75 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3  
L:93 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4  
L:111 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5  
L:126 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (6) SEQUENCE:  
L:161 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (9) SEQUENCE:  
L:169 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10  
L:187 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11  
L:205 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12  
L:223 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13  
L:241 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14  
L:259 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:15  
L:277 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:16  
L:295 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:17  
L:310 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (18) SEQUENCE:  
L:315 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (19) SEQUENCE:  
L:391 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:21  
L:409 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:22  
L:428 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:23  
L:446 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:24